



Journal Title: ITU News

Journal Issue: (no. 3) 2014

Article Title: World Telecommunication and Information Society Award Laureates

Page number(s): pp. 6-21

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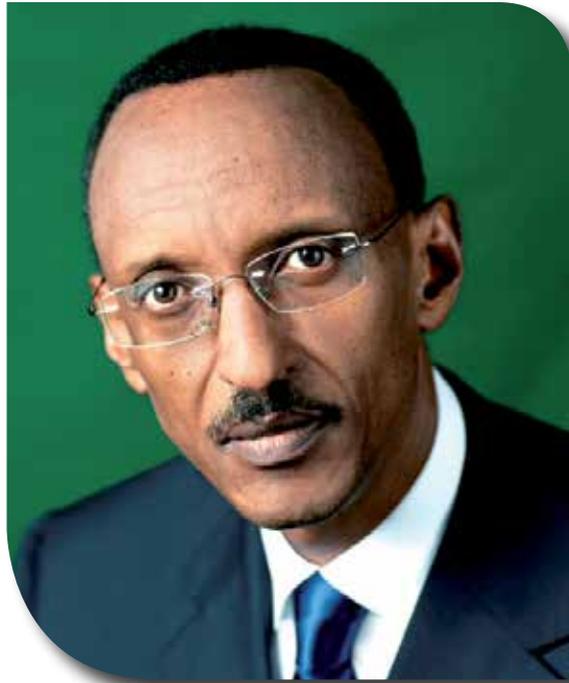
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Paul Kagame President of Rwanda

Paul Kagame, President of Rwanda, was born in October 1957 in Rwanda's Southern Province. His family fled pre-independence ethnic persecution and violence in 1960, crossing into Uganda where Mr Kagame spent 30 years as a refugee.

In 1990, Mr Kagame returned to Rwanda to lead the Rwandan Patriotic Front's four-year struggle to liberate the country and set it on its current course towards reconciliation, nation building and socio-economic development.

Mr Kagame took the Oath of Office as President of the Republic of Rwanda on 22 April 2000 after being elected by the Transitional National Assembly. He won the country's first-ever democratically contested multi-party elections in August 2003 and was re-elected to a second seven-year mandate in August 2010.

President Kagame has received recognition for his leadership in peace building and reconciliation, development, and advancement of education and of information and communication technologies (ICT). His leadership has guided African development overall, and promoted the ICT sector as a dynamic industry as well as an enabler for Africa's socio-economic transformation. In 2013, Mr Kagame co-hosted the Transform Africa Summit.

President Kagame currently co-chairs the United Nations Secretary-General's MDG Advocacy Group and the United Nations Broadband Commission for Digital Development.



ITU/I. Wood

President Paul Kagame receiving the Award from ITU Secretary-General, Dr Hamadoun I. Touré

► **Transforming Rwanda**

The Award — a sense of honour

Accepting the 2014 World Telecommunication and Information Society Award, President Kagame said “I want to express my gratitude and the sense of honour I feel in receiving this award. I do it in the humblest of ways knowing that this is an award of value that builds on the efforts of all Rwandans that have worked hard and embraced the policies and strategies of our development... This is the result of their efforts and progress and working together in our

country, and also working notably with ITU that has been very supportive of efforts in Rwanda.”

President Kagame went on to emphasize the importance of information and communication technologies (ICT) in driving his country’s development. He commended United Nations Secretary General Ban Ki-moon and ITU Secretary General, Dr Hamadoun I. Touré, for keeping the ICT agenda relevant to the socio-economic development of countries.

As he later explained, his country’s ICT strategy is based on integrating key sectors

in a system that combines connectivity, enabling policy and regulatory framework, as well as skills development and networks. A documentary featuring concrete examples of how the ICT and broadband revolution was changing the lives of Rwandans was shown during the award ceremony.

President Kagame, who co-chairs the Broadband Commission for Digital Development with Carlos Slim Helú, Chairman of Grupo Carso and President of the Carlos Slim Foundation, pointed out that public-private partnerships are a

win-win situation, because no one entity can, alone, do everything that needs to be done.

Smart Africa

Since the Connect Africa Summit in 2007, which President Kagame hosted, the private sector has invested USD 70 billion in Africa's ICT sector. Since this summit, Africa has witnessed unprecedented increases in mobile penetration and broadband connectivity. The continent has received a number of submarine cables on its shores, including SEACOM, EASSy, TEAMS, West African Cable System (WACS) and Africa Coast to Europe (ACE).

President Kagame was also the patron of the Transform Africa Summit, held in October 2013 in Kigali, which closed with the adoption of the Smart Africa Manifesto. Smart Africa aims to accelerate sustainable socio-economic development in Africa through affordable access to broadband and appropriate use of information and communication technologies. A novelty of the manifesto is the prominence given to the private sector. The Smart Africa Manifesto tackles challenges such as e-waste and the empowerment of previously marginalized groups. It also emphasizes cybersecurity, and the need to embrace more cost-effective innovations such as cloud computing, mobility, shared infrastructure and shared services.

To make the Smart Africa Manifesto more actionable, an implementation framework — the Smart Africa Alliance — is annexed to the manifesto. This envisages a partnership between each African country that adheres to the manifesto, the African Development Bank, the World Bank, ITU and the private sector.

Vision 2020

In 2000, President Kagame launched Vision 2020 — a road map to transform Rwanda, by 2020, from a low-income agrarian economy to a middle-income information-rich knowledge-based society. Vision 2020 was launched following a national consultative process conducted between 1997 and 2000 involving Rwandans from all walks of life, including leadership of all levels in the business community, government, academia and civil society.

Vision 2020 comprises six interlinked pillars, including good governance, an efficient State, skilled human capital, a vibrant private sector, a world-class physical infrastructure and modern agriculture and livestock, all geared towards national, regional and global markets.

The Government of Rwanda strongly believes that ICT can enable the country to leap-frog the key stages of industrialization and has invested heavily in this area since 2000. It has also integrated ICT through the

national information and communication infrastructure process as a key driver for socio-economic development and as a tool to fast-track Rwanda's transformation to a knowledge-based society.

Through this process, Rwanda has already established an enabling legal and regulatory environment, deployed world-class infrastructure and is developing a highly skilled human resource base — all are further positioning the country to increase its competitiveness and to achieve the United Nations Millennium Development Goals.

A competitive economy

Rwanda's economy has continued to grow at comparably good rates, averaging 8 per cent per annum, despite the global recessionary period that started in 2008. The country's continuing growth in the midst of the global downturn can be attributed to its good governance and sound fiscal discipline, as well as to the commitment of its public and private sectors to build a more equitable country.

The 2013 World Bank Doing Business Report ranked Rwanda 52nd out of 185 countries. In overall performance, Rwanda is still the best performing country in the east African region as well as the 3rd easiest place to do business in sub-Saharan Africa.

The 2013 Global Competitiveness Report, published by the World Economic Forum, ranked Rwanda the most competitive economy in the East African Community, third in sub-Saharan Africa, and raised its global ranking from 70 in 2012 to 63 in 2013.

Rwanda — a landlocked country — is now internationally connected by two submarine cables: the Eastern Africa Submarine Cable System (EASSY) through Uganda to Mombasa, Kenya; and The East African Marine System (TEAMS) submarine cable to Dar-es-Salaam, Tanzania.

Broadband infrastructure

The construction of the national fibre-optic backbone was completed in 2010. The backbone connects all urban districts as well as districts in remote and rural areas. The total network comprises 5003 km of fibre, of which 2503 km belong to the private sector. The quick roll-out was facilitated because the independent regulator reinforced the legal and regulatory framework to promote open competition and infrastructure sharing.

Besides laying a national fibre backbone underground, Rwanda has also rolled

out fibre above ground on its electricity national grid network. This creates extra coverage and reduces the risk of interrupted services if cables are cut.

With nationwide fibre-optic coverage, the country is embarking on ensuring that last mile access is provided to fully maximize the opportunity at hand. A study has been commissioned with the aim of mapping out Rwanda's broadband needs across the entire country in order to bridge the digital divide through last mile broadband connectivity. The plan is to install fibre to some premises and wireless broadband



A secondary school in a rural area connected to Internet through a very small aperture terminal (VSAT)

for the rest. A new market structure for better service provision will include rural and remote areas, taking into account affordability and digital literacy in regard to the uptake and adoption of broadband services.

New investment currently focuses on fourth-generation Long-Term Evolution (4G LTE) wireless broadband. Rwanda has adopted 4G LTE wireless broadband network as the last mile solution for urban and rural areas. It will be operated on a wholesale basis, with open access to all operators. The infrastructure will boost access to various broadband services, such as e-governance, e-banking, e-learning and e-health. The network connects more than 360 institutions — both government and private — in all 30 districts of the country, and connects all nine Rwandan borders.

Inclusiveness

President Kagame has led his country towards inclusiveness and open access to knowledge. In a practical move to bridge the digital divide, four buses are crossing the countryside to take computing and Internet services to remote and under-served areas. The buses are mobile telecentres as well as computer labs, and they offer convenient and affordable services and training to farmers, traders, students, women, youth groups, entrepreneurs and other rural inhabitants.

Rwanda has 94 telecentres located throughout its 30 districts, the target being to connect all villages using telecentres

by 2020. The telecentres provide training in computer use and have allowed local enterprises such as agricultural co-operatives, handicraft industries, artisans, shops, garages and tourist facilities to gain access to accurate market and pricing information. These multi-purpose telecentres are strategically located where people, especially in rural areas, can gain access to information and learn how to use the Internet. The Universal Access Fund subsidized bandwidth for telecentres, educational institutions, health institutions and other public institutions, totalling 110 Mbit/s of bandwidth from Intelsat.

Digital public information kiosks have also been installed at several sites. They are normally composed of touch screens and printers, and they are connected to the Internet. People can check basic information online, saving time that would have been spent physically going to different institutions.

Currently, a national literacy and awareness campaign is focusing on rural people to raise their awareness of online services such as social media, electronic banking (for example, mobile money) and other Internet services. This campaign aims, by 2018, to make 50 per cent of the population aged 15 years and above computer literate, and to increase the use of information services among at least 60 per cent of the same population.

In a bid to increase digital television penetration in the country, the government has started a special programme to facilitate affordable access to digital

television sets, again with a special focus on rural areas. This programme is called Tunga TV, which means “Own a TV”. To start with, 700 viewing centres will be set up across the country, and the number of such centres will keep growing. Each centre will be equipped with a cable television, two computers connected to the Internet, as well as a fixed telephone to help people without mobile phones. The centres will be powered by solar energy where the electrical grid is not yet available. It is expected that the programme will push television penetration from the current 6 per cent to 40 per cent in the next five years.

Partnerships

President Kagame has sought partnerships to boost Rwanda’s own efforts to achieve development by spreading the use of information and communication technology. For example, the Rwanda Development Board, in partnership with volunteers from the Korea International Cooperation Agency, has started a digital e-library to be used in all the 30 business development centres countrywide. Physical libraries at telecentres will be equipped with Samsung Galaxy tablet computers, which will offer a suitable way of accessing information.

Another example is the One Laptop per Child project, which aims to enhance education by introducing information technology in primary schools. The project gives primary school students early access to computer skills and computer science,



Rwanda's country report on the WSIS+10

Children using One Laptop per Child

while expanding their knowledge on specific subjects such as science, mathematics, languages and social sciences through online research or content hosted on the server. The One Laptop per Child project was launched in June 2008 and started with two pilot projects. The first pilot project distributed 8150 laptops in 10 public schools, while 1800 laptops were bought by parents from 12 private schools. In the second pilot project, the Government of Rwanda entered into partnership with the Microsoft Corporation to train teachers and local school technicians. As part of this pilot project, electrical installations and

Internet access were set up in classrooms, and content servers were installed.

President Kagame is aware of the need for an enabling environment. With the establishment of the Kigali Free Trade Zone, Rwanda again looks at moving forward and fast-tracking development in all sectors. The zone will be home to various industries, including an information and communication technology park. It will provide tax incentives for businesses situated there, especially those targeting the export market. These incentives include zero per cent corporate tax, exemption from value-added tax, zero per cent import duty,

and write-off of 100 per cent of research and development costs, among other advantages. At the core of the technology park will be Carnegie Mellon University, with which the government of Rwanda has partnered to establish a centre of excellence that will develop highly skilled information and communication technology professionals. The technology park, which will be oriented towards research and development, is expected to cover areas such as business process outsourcing, cloud computing, technological education and training, e-government, cybersecurity, and mobile solutions. ■

Source: Rwanda's country report on the WSIS+10: Overall Review of the implementation of the WSIS outcomes.



Park Geun-hye President of the Republic of Korea

Park Geun-hye, President of the Republic of Korea, was born on 2 February 1952. She graduated from Sogang University, Seoul, in 1974 with a Bachelor of Science in Electronic Engineering. Since then, she has been awarded Honorary Doctorates by several universities, including an Honorary Doctorate in Science by the Korea Advanced Institute of Science and Technology, Daejeon, and an Honorary Doctorate in Politics by both Pukyong National University, Busan, and Sogang University. During her high-flying career, Ms Park has been Director of the Yukyoung Foundation, and has chaired Youngnam University in Daegu and the Korea Culture Foundation. From 1974 to 1979, she was Acting First Lady of the Republic of Korea and also served as Honorary President of the Girl Scouts of Korea. From 2000-2004 she was Member of the Gender Equality and Family Affairs Committee, and Member of the Science, Technology, Information and Telecommunication Committee.

From 2004 to 2008, Ms Park was a lawmaker in the 17th National Assembly and served on the Committee for National Defense, Government Administration and Local Autonomy, and the Committee for the Environment and Labour. In 2012, she was a lawmaker in the 18th National Assembly and served on the Committee for Health, Welfare and Family Affairs, and the Committee for Strategy and Finance. She was also Chairman of the Emergency Committee of the Saenuri Party. In December 2012, Ms Park was elected as the 18th President of the Republic of Korea and took up office in February 2013. She is the Republic of Korea's first female President.

The goal of her administration is "to work together with the people to realize economic prosperity, happiness and cultural enrichment". In this context, her administration will ensure a prosperous life for Koreans by revitalizing the economy. It will also "strive to make life comfortable and happy with tailored welfare programmes and education that nurtures dreams and talents".



ITU/I. Wood

▶ **Republic of Korea, world leader in ICT**

Choi Mun-kee, Minister of Science, ICT and Future Planning, receiving the Award from ITU Secretary-General, Dr Hamadoun I. Touré, on behalf of President Park Geun-hye of the Republic of Korea

President Park Geun-hye's vision for humanity is built on sustainable development. Speaking via video as a winner of the World Telecommunication and Information Society Award during the World Telecommunication and Information Society Day celebrations held at ITU headquarters on 16 May 2014, President Park said that she sees broadband as essential to achieving this vision because it serves as an enabler of innovation and growth. Recognizing that broadband adds value across the entire spectrum of industries, creating new jobs, the Republic of Korea as an early adopter has been rolling out broadband networks, boosting competition and encouraging investment in the telecommunications market, fostering the information and communication technology industry, and providing education to enhance computer literacy.

President Park's award was collected on her behalf by Minister Choi Mun-kee. "As the Minister of Science, ICT and Future Planning in charge of the Korean ICT Authority, it is truly an honour to accept the World Telecommunication and Information Society Award on behalf of the President of the Republic of Korea. Broadband has been a key infrastructure driving our country's economic growth since the late 1990s.

We are also harnessing broadband as a foundation for convergence and innovation to move beyond the informatization era and realize the vision of 'creative economy'. Drawing from our experience and capacity, the Republic of Korea now feels a responsibility bestowed on us to participate in international efforts to promote broadband across the world. We will step up efforts towards globalized ICT development as an ITU member and Council Member State." He added that he would share the highlights of the day's deliberations with President Park "to help further advance discussions on sustainable development".

The Ministry of Science, ICT and Future Planning was created under a reorganization plan initiated by President Park in an effort to generate new sources of economic growth in the areas of science and information technology. Having pledged to create the ministry during her election campaign, President Park announced its creation in February 2013 when she was sworn in. The ministry plans to cement the foundation of science and technology in the Republic of Korea by boosting progress in the fields of basic science and software. ICT is seen as a future growth engine for the country and this ministry will be the main government agency responsible for the nation's future economic growth and job creation.

Connecting all citizens

The Republic of Korea has made information and communication technologies

a national priority, and has demonstrated clear leadership both in developing and using such technology, and in formulating targeted policies that have driven growth and uptake.

Some 97 per cent of homes have a broadband Internet connection — and the country enjoys one of the highest average advertised broadband speeds in the world, according to the 2013 edition of ITU's report: *Measuring the Information Society*. Published in October 2013, the report features the latest ICT Development Index and ICT Price Basket — two benchmarking tools to monitor information society developments worldwide.

The Index ranks 157 economies, and the Republic of Korea was world number one, for the third consecutive year, in terms of overall development of ICT.

The country was one of the first worldwide to adopt mobile broadband third-generation technologies. It has now passed the 100 per cent penetration rate for active mobile-broadband subscriptions.

Various telecommunication and broadcasting services such as Internet protocol television (IPTV), e-learning and e-health have become common for those living in urban areas, thanks to a high-speed broadband network. But so far, delivery of such services to small rural communities has been a challenge. The government has recognized the vital importance of improving the network as a way to deliver high-quality education and healthcare services to farmers and fishermen.

To ensure that all people have Internet access, the government initiated a public Wi-Fi project in 2012, providing free-of-charge Wi-Fi service in public places such as parks, museums and libraries. In cooperation with operators, the government is implementing Wi-Fi networks in public places, sharing the networks to reduce service costs and manage mobile data traffic. Three mobile carriers have already built 2000 public Wi-Fi zones, and plans are under way to deploy 10 000 in total by 2017.

Digital natives

Internet usage among young people in the Republic of Korea is high: by 2012, almost 100 per cent of the country's young population qualified as digital natives (defined as networked youth aged 15–24 years with five or more years of online experience). Digital natives account for 13.5 per cent of the population of the Republic of Korea, compared to 5.2 per cent globally.

The government has made extensive efforts to adapt its education system to the needs of digital natives and to take advantage of information and communication technology to transform the way students learn. Its Self-directed, Motivated, Adaptive, Resource-enriched and Technology-embedded learning (SMART) Education project aims, by 2015, to ensure that all students will be able to access cloud-based educational services via wireless Internet in school, and use the learning



materials whenever and wherever they want. Teachers will also have opportunities to further develop their skills in this area.

Robust ICT industry, robust economy

The country has a strong domestic ICT industry with a number of large manufacturers and operators, including Samsung, LG, KT, Hanaro Telecom and LG Telecom. Other factors that contribute to the country's strong performance include high educational levels, government awareness and support for ICT projects, as well as an

ICT culture — people are ICT savvy and eager to adopt new technologies.

The Republic of Korea has achieved a robust economy, and is one of the world's key exporters of information and communication technology. Samsung has had the biggest market share in the global flat-panel television market for seven consecutive years. The company has also grown at an astonishing rate to become the world's largest phone manufacturer, overtaking Nokia. In 2013, its share of the overall handset market grew to 24.6 per cent, having sold around 450 million handsets — almost twice as many handsets as the

number-two vendor, Nokia. Samsung also extended its dominance in smartphones to 31.1 per cent, having sold a record 300–314 million smartphones — more than twice as many as the number-two vendor, Apple — according to IDC and Gartner. One in three smartphones sold in 2013 was a Samsung.

The Electronics and Telecommunications Research Institute in the Republic of Korea predicts that the domestic market in information and communication technology will increase in value from USD 36.5 billion in 2010 to USD 123.7 billion in 2020.

Smart society

In New Songdo City, the government is creating a “ubiquitous city” on a 1500-acre manmade island off the Republic of Korea’s Incheon coast. When completed in 2015, New Songdo City will include 350 buildings, housing 65 000 residents and a workforce of 300 000 people. A single smart card, created through the innovative use of information and communication technology, will enable residents to take advantage of various transport options. The card will be usable on the subway, to pay for parking at a meter, to see a movie, or to borrow a free public bicycle. Broadband applications will also support municipal services such as a water re-use network, pneumatic waste collection and the energy network.

Mitigating climate change

The rapid industrialization and urbanization induced by the Republic of Korea’s remarkable economic growth has led to significant pressure on its environment and natural resources. Priorities currently include green information and communication technologies, such as green personal computers, telecommunications and servers. Advanced industries relying on information and communication technologies, for example e-health, smart grid, smart waste management and smart public transport, are also priority areas.

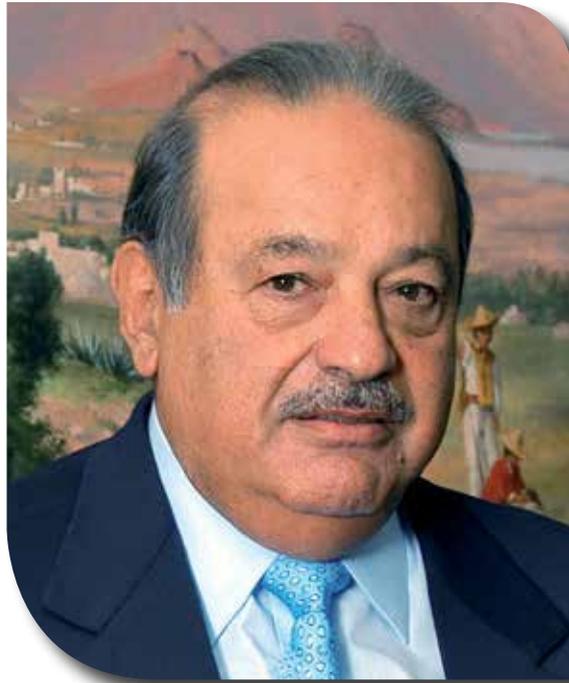
Unlike conventional “dumb” electricity grids, smart grids allow two-way communication between electricity suppliers and consumers, as well as enabling more dispersed generation and storage of power. The smart grid test bed on Jeju Island is expected to become the world’s largest smart grid community for testing advanced smart grid technologies and for the development of new business models.

Since 2012, the Republic of Korea has hosted the secretariat of the United Nations

Climate Fund (the Green Climate Fund), a United Nations fund established to distribute some of the aid pledged by developed countries to relatively poorer countries. In future, the Republic of Korea is expected to play a bigger role on the international stage in tackling global challenges, and to become the centre for global efforts to move towards mitigating climate change and promoting green growth.

Sustainable development

Inviting delegates to the 19th ITU Plenipotentiary Conference, to be held in Busan, Republic of Korea, from 20 October to 7 November 2014, President Park said that the government is working on presenting a vision and path for development that would benefit humanity in a hyper-connected digital world based on the Internet of things. She emphasized that in deciding on the future development and strategies of the ICT sector, the ultimate goal of the conference should be sustainable development. ■



Carlos Slim Helú
Chairman of Grupo Carso and President
of the Carlos Slim Foundation

Carlos Slim Helú, Chairman of Grupo Carso and President of the Carlos Slim Foundation, studied Civil Engineering at the National Autonomous University of Mexico, where he also taught Algebra and Linear Programming while studying for his degree. A Mexican, son of Lebanese immigrants and a self-made man, Mr Slim is a widely known successful businessman and philanthropist.

Mr Slim's interest for technology is long standing. He has achieved success in the world of business through investments in a diverse range of industries, as reflected in the portfolio of the Carso Group, which include infrastructure and construction, financial services, retail and commercial services, as well as telecommunications, where his América Móvil is currently the leading supplier of telecommunication services (fixed line, mobile, Internet, and television) in Latin America. The company also operates in the United States and Europe. He is committed to the promotion of technologies for development and has been co-chairman of the United Nations Broadband Commission for Digital Development since 2010.

Carlos Slim Helú promotes social development in Mexico and Latin America through the Carlos Slim Foundation, which has changed the lives of millions of people. The foundation's initiatives include early childhood development, providing over 360 000 scholarships to students and young entrepreneurs, setting up over 3600 digital classrooms and libraries in Mexico, the rehabilitation of Mexico City's historic district, the preservation of Mexico's natural areas and the construction of Museo Soumaya, home to one of the finest art collections in the world. Mr Slim has received a number of awards for his business and social activities, including the Lebanese Gold Order of Merit, the Order of Leopold II (awarded by the Belgian Government), and the Red Cross Badge of Honour and Merit.



ITU/I. Wood

Carlos Slim Helú, receiving the Award from ITU Secretary-General, Dr Hamadoun I. Touré

► *Changing the lives of millions*

Entrepreneurship plus philanthropy

In his acceptance speech as winner of World Telecommunication and Information Society Award 2014, Carlos Slim Helú said "This is a true honour and a real pleasure and pride for me to receive an award together with her Excellency Park Geun-hye, President of the Republic of Korea and his Excellency President Paul Kagame of Rwanda, who, furthermore, has been a very dear colleague in the work of the Broadband Commission for Digital Development, which we both co-chair."

Speaking of "Broadband for sustainable development" — this year's theme of World Telecommunication and Information Society Day — Mr Slim stated "it is clear that sustainable development is a real global need, and a real regional need... and broadband is the strategic tool to achieve these needs". He described how using broadband in the areas of education, health care, finance, the environment, and innovation, could "lead to vigorous economic growth that is both sustained

and sustainable, with social advancement, offering equal opportunities for all".

Participants in the World Telecommunication and Information Society Award ceremony were shown a documentary featuring examples of Carlos Slim Helú's activities, including his Foundation's social, high-impact programmes focused on the most vulnerable populations to ensure digital inclusion for all. Here we share some of the highlights from the documentary.

In 1965, at the age of 25, Carlos Slim Helú laid the foundations for *Grupo Carso* and *Grupo Financiero Inbursa*. In the following years he embarked on activities in several different sectors and by the end of the 1980s his holdings had grown to become one of the largest business conglomerates in Latin America. In December 1990, in a partnership with France Telecom, Southwestern Bell and a group of Mexican investors, he bought 20.4 per cent of Telmex stock and gained control of the company. In 2002, he founded *América Móvil*, which is now the leading company in Latin America and is present in 26 American and European countries (including the United States). In terms of population access, *América Móvil* is the second largest telecommunication operator in the world excluding China. A noteworthy innovation by Carlos Slim Helú in his telecommunications business is Telcel — his pioneering prepaid system for mobile phones.

Telmex's growth in Mexico increased fixed broadband access from 67 000 in 2002 to nearly 9 million now, representing an annual growth rate of 56 per cent. Regarding mobile broadband, *América Móvil* data traffic has increased more than 15-fold since 2008 — at a rate of about 80 per cent per year — increasing Internet penetration, supporting economic growth, and reducing inequality, unemployment and poverty.

“Our main challenges today, in all countries, are high-quality digital education and offering good jobs to everyone”, says Mr Slim. In line with this view, Telmex has been active in providing training in the area of information and communication technologies. Since 1991, Telmex has built state-of-the-art educational facilities in different venues, making modern technologies available to low-income communities. Telmex has installed more than 3600 digital classrooms and public digital libraries throughout Mexico, in addition to innovation hubs (technological innovation spaces) that provide free access to computer equipment, high-speed Internet, and introductory courses and training on information and communication technologies. Mr Slim says that operators have to offer customers the best conditions in quality, price and technology over multiple platforms. In Latin America, we are creating free digital libraries mainly in public schools where people can go to learn and surf the web for free with loaned computer equipment at high speeds. In Telmex's *bibliotecas digitales*, IT training is provided, while people can borrow laptops and take them home. The company is developing thousands of Wi-Fi hot spots for its customers.



In 1986, Mr Slim created the Carlos Slim Foundation. In 1995, he created the Telmex Foundation. These two foundations are the largest in Latin America, and they have provided support to millions of people in Mexico and throughout the American continent. Created to provide high impact programmes focused on the most vulnerable segments of society, the Carlos Slim Foundation alone has benefited over 29.7 million people. Based on the principles of social responsibility, efficiency and opportunity, the foundation supports initiatives in education, health, nutrition, social justice, culture, human development, natural disaster relief, economic development, environmental protection and conservation. Its programmes contribute to improving the quality of life of people in all age groups, fostering human capital development and providing opportunities for the growth of individuals and their communities.

In 2013, the Carlos Slim Foundation and the Khan Academy joined forces to provide access to world class education to Mexican and Latin American people, free of charge, through online training courses on the web. More than 4200 educational videos are currently accessible online.

In January 2014, the Carlos Slim Foundation and *Coursera* joined together as partners to deliver graduate studies in the Spanish language, online at no cost, to millions of people. The partnership will focus on three objectives: improving access to high-quality Spanish educational content; creating educational content aimed at improving the possibilities for individuals

to find a job; and increasing access to physical venues where students can personally attend *Coursera* training courses. The initiative includes a major project to translate the best courses from Spanish. A network of learning centres will be created to provide students with a rich educational experience, combining on-line and off-line courses to improve retention of knowledge and learning outcomes.

The learning centres will take advantage of existing Telmex infrastructure, with the support of the Carlos Slim Foundation's programmes for digital education and culture. The programmes operate digital libraries, fourteen of which are located in highly populated low-income areas. The centres will have access to the Telmex Hub, a technological innovation pole located in Mexico City.

In March 2013, Mr Slim played host to the ITU's seventh meeting of the Broadband Commission for Digital Development, which he co-chairs with Rwanda's President Paul Kagame. "The Broadband Commission is documenting best practices, so we can know and learn from what is being done in different countries. However, with such rapid technological change, serious challenges are arising, due to a lack of the deep structural changes accompanying civilizational change. We are seeing very high unemployment, especially among youth. What activities will create new jobs? Where are these new jobs being formed? We need to promote sectors which will create these new jobs. Governments should introduce IT in their activities, and promote digital culture

and economic activities that are creating new jobs. It is clear that IT is a key tool for economic growth. There are huge vistas of opportunity opening up to create millions of jobs, with the possibility of developing hundreds of thousands of apps and content that can be used by everyone connected via the web", said Mr Slim.

The Broadband Commission's meeting was held in parallel to the 2013 Digital Village, which was attended by ITU Secretary-General Dr Hamadoun I. Touré and many commissioners. That year, the Digital Village attracted an audience of over 154 000, becoming the largest digital inclusion world event. The Digital Village was open to all kinds of people, regardless of age or level of technological skill.

A year later, in 2014, the Carlos Slim Foundation, Telmex and Telcel again organized the Digital Village in Mexico City's main square. This edition offered an even wider array of digital training and educational activities including workshops, support to entrepreneurs, introductory courses on computers and the Internet, as well as courses on robotics, three-dimensional (3D) animation, advanced programming, and healthcare applications. During the 2014 edition of the Digital Village, Mr Slim announced the training for employment initiative; a platform to provide online courses making it possible to learn 20 different skills, for example to work as a computer technician, or to take up a job in the field of construction, electricity or carpentry.

The 2014 Digital Village was attended by 49 global leaders who spoke to the



Telex

participants and to the millions who connected live online. The videoconferencing facilities offered Internet connection of 100 Gbit/s. The Digital Village broke its own record as the world's largest digital inclusion event, with more than 258 000 participants in 2014, including children, young adults and senior citizens. The youngest participant was only 2 years old and the oldest was 97.

"Telecommunications are the nervous system of this new civilization, they are fundamental for the growth and development of all countries", says Mr Slim who, as a philanthropist, has contributed to the economic and social development of Mexico and Latin America.

Mr Slim takes the view that "Technology and innovation are what makes it possible for human civilization to advance." As he noted in "The State of

Broadband 2012: achieving digital inclusion for all," report (published by ITU in September 2012), throughout history, technology and innovation have transformed the way we live and brought about civilizational change. "Today, the digital revolution is transforming our world and our societies even faster, some of which are now connected through voice data and video at the speed of light... The telecommunication network represents the circulation system of the knowledge society, with advances in IT and computing leveraging our knowledge and brainpower. The development of the Internet has triggered profound socio-economic and political changes, and is transforming the services industry. Broadband Internet should be accessible to all — this is the aim of work under way at the United Nations and ITU. In 2010, ITU and UNESCO launched the Broadband

Commission to provide universal access to broadband and universal access to connectivity. Today, being connected is crucially important — everyone has to be connected; everyone should have access to knowledge and understanding — for education, health, business and entertainment. The Broadband Commission is working for digital inclusion for all by 2015," Mr Slim wrote in the report's "Featured insight 1: How broadband is changing our society."

An entrepreneur with a heightened sense of social responsibility, Carlos Slim Helú is also passionate about history, the arts, astrophysics, nature and sports but above all he is devoted to his family. "Our will must always overcome our weaknesses," he says at the end of the documentary. ■